

On page 30, replace the paragraph on line 2 through line 14 with the following new paragraph:

Referring back to FIG. 4, the stub 404 corresponding to a service is registered in the lookup service 400 and is used by the client computer 11(n) to access the service methods remotely. This stub 404 may also be a "smart proxy." A smart proxy, code within which a stub is embedded, helps the client more efficiently implement the stub and the method to be remotely invoked. A smart proxy often performs some local computation for efficiency before or after it actually calls the stub. For example, a smart proxy may contain code to cache information, so if a client requested it again, instead of going back to the server to get the information, it may have cached the answer and be able to return it quickly. If the situation called for it, a smart proxy might also transform the parameters received from the client into other types and then send the transformed types. The smart proxy concept is further explained in co-pending U.S. Patent Application No. 09/044,930, entitled "Downloadable Smart Proxies for Performing Processing Associated with a Remote Procedure Call in a Distributed System," assigned to a common assignee, filed on even date herewith, which is hereby incorporated by reference.

IN THE CLAIMS:

Please cancel claim 1 without prejudice and without forfeiting any of the claimed subject matter, and add new claims 28-61, as follows:

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28. (New) A method in a data processing system for accessing network services associated with a lookup service, comprising the steps of:

receiving a request from a client by the lookup service for access to one of the network services, the client being remote with respect to the lookup service; and

returning a resource locator to the client from the lookup service so that the client may dynamically load executable code to facilitate access of the one network service.

29. (New) The method of claim 28, further comprising the step of:

using the returned resource locator to dynamically load executable code to facilitate access of the one network service.

30. (New) The method of claim 29, further comprising the step of:

accessing the network service by the client using the dynamically loaded executable code.

31. (New) The method of claim 28, wherein the step of returning a resource locator includes the step of:

returning stub information to the client.

32. (New) The method of claim 31, further comprising the step of:

using the resource locator in the client to dynamically load executable code for the stub.

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33. (New) The method of claim 32, further comprising the step of:
accessing the network service by the client using the dynamically loaded
executable code.

34. (New) The method of claim 28, wherein the step of returning a resource
locator includes the step of:
returning smart proxy information to the client.

35. (New) The method of claim 34, further comprising:
using the resource locator in the client to dynamically load executable code for a
smart proxy.

36. (New) The method of claim 35, further comprising the step of:
accessing the network service by the client using the dynamically loaded
executable code.

37. (New) A method in a data processing system having a lookup service
with a plurality of services, the method comprising the steps of:

sending from a client to the lookup service a request to access one of the
services, the lookup service being remote with respect to the client; and

receiving, responsive to the request, by the client from the lookup service, a
resource locator to dynamically load executable code to facilitate access of the one
service.

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38. (New) The method of claim 37, further comprising the step of:
using the received resource locator to dynamically load executable code to
facilitate access of the one network service.

39. (New) The method of claim 38, further comprising the step of:
accessing the service by the client using the dynamically loaded executable
code.

40. (New) The method of claim 37, wherein the step of receiving a resource
locator comprises the step of:

receiving stub information; and

using the resource locator to dynamically load executable code for the stub.

41. (New) The method of claim 40, further comprising the step of:
accessing the network service by the client using the dynamically loaded
executable code.

42. (New) The method of claim 37, wherein the step of receiving a resource
locator comprises the step of:

receiving smart proxy information; and

using the resource locator to dynamically load executable code for a smart proxy.

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43. (New) The method of claim 40, further comprising the step of:
accessing the network service by the client using the dynamically loaded
executable code.

44. (New) A distributed system with a plurality of network services,
comprising:

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a server computer with a lookup service having a resource locator corresponding
to dynamically executable code for facilitating access to one of the network services;
and

a client computer with a program that sends a request to the lookup service for
the one network service, that receives the resource locator from the server computer,
and uses the resource locator to dynamically load executable code to facilitate access
of the one network service.

45. (New) A data processing system for accessing network services
associated with a lookup service, comprising:

means for receiving a request from a client by the lookup service for access to
one of the network services, the client being remote with respect to the lookup service;
and

means for returning a resource locator to the client from the lookup service such
that the client may dynamically load executable code to facilitate access of the one
network service.

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46. (New) A computer-readable medium containing instructions for controlling a data processing system to perform a method for accessing network services associated with a lookup service, the method comprising the steps of:

receiving a request from a client by the lookup service for access to one of the network services, the client being remote with respect to the lookup service; and

returning a resource locator to the client from the lookup service so that the client may dynamically load executable code to facilitate access of the one network service.

47. (New) The computer-readable medium of claim 46, wherein the method further comprises the step of:

using the returned resource locator to dynamically load executable code to facilitate access of the one network service.

48. (New) The computer-readable medium of claim 47, wherein the method further comprises the step of:

accessing the network service by the client using the dynamically loaded executable code.

49. (New) The computer-readable medium of claim 46, wherein the step of a returning a resource locator comprises the step of:

returning stub information to the client.

50. (New) The computer-readable medium of claim 49, wherein the method further comprises the step of:

using the resource locator in the client to dynamically load executable code for the stub.

51. (New) The computer-readable medium of claim 50, wherein the method further comprises the step of:

accessing the network service by the client using the dynamically loaded executable code.

52. (New) The computer-readable medium of claim 46, wherein the step of returning a resource locator comprises the step of:

returning smart proxy information to the client.

53. (New) The computer-readable medium of claim 46, wherein the step of returning a resource locator comprises the step of:

using the resource locator in the client to dynamically load executable code for a smart proxy.

54. (New) The computer-readable medium of claim 53, wherein the method further comprises the step of:

accessing the network service by the client using the dynamically loaded executable code.

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55. (New) A computer-readable medium containing instructions for controlling a data processing system to perform a method for accessing network services associated with a lookup service, the method comprising the steps of:

sending from a client to the lookup service a request to access one of the services, the lookup service being remote with respect to the client; and

receiving, responsive to the request, by the client from the lookup service, a resource locator to dynamically load executable code to facilitate access of the one service.

56. (New) The computer-readable medium of claim 55, wherein the method further comprises the step of:

using the received resource locator to dynamically load executable code to facilitate access of the one network service.

57. (New) The computer-readable medium of claim 56, wherein the method further comprises the step of:

accessing the network service by the client using the dynamically loaded executable code.

58. (New) The computer-readable medium of claim 55, wherein the step of receiving a resource locator includes the step of:

receiving stub information; and

using the resource locator to dynamically load executable code for the stub.

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